

Claims

1. A belt retractor for a vehicle safety belt, said belt retractor comprising a frame and a belt spool (1) which is rotatably mounted in said frame, and at least one locking toothing (2, 3) which is connected with said belt spool, a first locking
5 catch (5) and a second locking catch (6) being provided, which are supported on said frame and can engage into said at least one locking toothing (2, 3), said first locking catch (5) being able to swing about a point of rotation which is arranged such that with said first locking catch (5) guided into said locking toothing (2, 3) a
10 virtual line, which passes through a point of contact between said first locking catch (5) and said locking toothing (2, 3) and stands perpendicularly on a tooth face in said point of contact, runs between said point of rotation and a rotation axis of said belt spool (1), and said second locking catch (6) being able to swing about a point of rotation which is arranged such that with said second locking catch (6) guided into said locking toothing (2, 3), a virtual line which passes
15 through a point of contact between said second locking catch (6) and said locking toothing (2, 3) and stands perpendicularly on a tooth face in said point of contact, runs on the side of said point of rotation facing away from said rotation axis of said belt spool (1).

2. The belt retractor according to Claim 1, characterized in that in a process
20 of guiding in, said first locking catch (5) when guided in engages into said locking toothing (2, 3) and said second locking catch (6) when guided in arrives into a non-locking position spaced apart from said tooth face of said locking toothing (2, 3).

3. The belt retractor according to Claim 2, characterized in that said first
25 locking catch (5) is constructed so as to be flexible.

4. The belt retractor according to Claim 3, characterized in that said first locking catch (5) is constructed as an additional part on said second (6) locking catch, which is connected with said second locking catch (6) by a predetermined breaking point.

5 5. The belt retractor according to Claim 1, characterized in that a first locking tothing (3) and a second locking tothing (2) are provided, which each are connected with said belt spool, said first locking catch (5) being able to engage into said first locking tothing (3) and said second locking catch (6) being able to engage into said second locking tothing (2).

6. The belt retractor according to Claim 5, characterized in that teeth of said first locking tothing (3) are constructed without undercut and teeth of said second locking tothing (2) are constructed with undercut.

10 7. The belt retractor according to Claim 1, characterized in that teeth of said first locking catch (5) are constructed without undercut and teeth of said second locking catch (6) are constructed with undercut.

15 8. The belt retractor according to Claim 5, characterized in that said first locking tothing (3) is arranged on a locking disk which is rotatable relative to said second locking tothing (2), and that a spring (4) is provided, which urges said locking disk relative to said second locking tothing (2) into an initial position in which it precedes said second locking tothing (2).

20 9. The belt retractor according to Claim 1, characterized in that with said locking catch (5) guided into said locking tothing (3), a virtual line which passes through said point of contact between said locking catch (5) and said locking tothing (3) and stands perpendicularly on said tooth face in said point of contact, runs right through said point of rotation of said locking catch (5).

10. The belt retractor according to Claim 1, characterized in that said first locking catch is produced from a flexible material.